1083

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1
1 Congress Street, Suite 1100
BOSTON, MA 02114-2023

September 25, 2003

Stuart Muller
12 Wilson Pond Lane
Rowley, MA 01969

Re: Arsine Gas Cylinder Recycling

Dear Mr. Muller:

On August 11, 2003, we sent you a regulatory interpretation letter regarding your proposal to recycle arsine gas cylinders. We advised that if you establish an off-site facility to receive, store and recycle hazardous cylinders (e.g., cylinders containing contaminated adsorbent media and residual arsine gas that fail the TCLP regulatory test for arsenic), the cylinders will need to be shipped to the facility as a hazardous waste and the facility will need a RCRA permit. We have now reviewed your letter dated July 27, 2003 to Senators Kennedy and Kerry and Representative Tierney. We would like to explain why we continue to believe that handling the cylinders as a hazardous waste and obtaining a RCRA permit will be needed for your proposed operation.

Your letter quotes an EPA representative as stating that when one company's waste is another company's product, the material need not be shipped as a hazardous waste to the receiving company. This is correct assuming that what is shipped is indeed a product and is used by the receiving company as is. But this is not what you are proposing. Rather, you are proposing to receive cylinders which contain arsine gas that, due to the contaminated adsorbent media, are not reuseable until the media undergoes some type of physical or chemical treatment process that removes enough of the arsine gas to safely open the cylinder. Only when the cylinder is opened can the contaminated media be removed. Thus, hazardous waste requirements apply to the contaminated cylinders prior to reclamation (assuming that they would fail the TCLP test for arsenic), and of course to any additional wastes which are generated as a result of this proposed operation, including contaminated media, and gas captured in filters, which are removed from the cylinders, if they fail the TCLP test. Once the cylinders undergo treatment and the contaminated media is removed, the cylinders would be decontaminated. The cylinders would then be considered to be products, and the hazardous waste requirements would no longer apply.

CONCURRENCES

SYMBOL	CHW	SF	CHW	SER	CMB			
JRNAME		FW/EF	Coosher					
DATE	9/23/03	9/23/03	9/23/03	9/25/03	9/25/03			

Your July 27 letter also refers to the cylinders you plan to recycle as being "empty." But our understanding is that the containers will be filled with the contaminated adsorbent media as well as containing some residual arsine gas. Under both the federal and Massachusetts hazardous waste regulations, one of the requirements that must be met before a container is considered to be "empty" (and thus not subject to regulation) is that there must be no more than one inch of residue remaining in the container. A cylinder filled with adsorbent media clearly has more than one inch of residue. This is not a "gray area"- we simply see no basis for agreeing that these cylinders will be legally empty.

Your letter states that the EPA position that a RCRA permit is required will "prevent" you from proceeding with your proposed recycling operation. We would note a number of points in response. First, the EPA has not said that you may not pursue the recycling operation. Rather, we have raised some concerns which must be addressed (e.g., potential air emissions), and also have advised as to the level of hazardous waste regulation that would apply to the operation. The major difference of opinion comes down to whether a full RCRA permit (such as a Massachusetts Class C recycling permit) will be needed for the proposed operation or whether it will be sufficient for you to get a Massachusetts Class A recycling permit. Massachusetts initially developed the Class A program to cover recycling of materials that are not considered hazardous wastes under the federal program. More recently, Massachusetts has asked the EPA to approve the expansion of this program to cover on-site recycling by initial generators of hazardous wastes, and the EPA plans to soon propose to approve this expansion of the program.

However, Massachusetts has not proposed and the EPA is not planning to approve any expansion of the Class A program to cover the off-site recycling of federally regulated hazardous wastes. As we have previously advised, the EPA is of the opinion that the contaminated arsine gas cylinders when discarded by the manufacturer will be spent materials and thus are federally regulated hazardous wastes when being reclaimed (assuming that they would fail the TCLP test). Thus we think it clear, as a legal matter, that a full RCRA permit rather than a Class A permit will be required for your proposed recycling operation.

Obtaining a Class C permit may be more costly than obtaining a Class A permit, but we think this is the correct result of requiring that the appropriate higher level of regulation apply to your proposed operation. For example, one of the permit requirements applicable to off-site recyclers storing federally regulated hazardous wastes is to obtain financial assurance (such as insurance) to ensure that any environmental releases are addressed and that ultimately the facility is properly closed. Financial assurance is not required in the Class A program.

Other businesses across the country have set up successful recycling operations after obtaining full RCRA permits. The EPA encourages recycling, including the recycling of non-hazardous components of wastestreams, such as you propose. But it is not appropriate for the EPA to ignore generally applicable environmental requirements. While we recognize that you may choose not to proceed with your proposed recycling operation if you must obtain a RCRA permit, we think that allowing your project to go forward without the appropriate level of regulation would be inappropriate, in light of the environmental and safety risks that might result.

To summarize, we see no basis for changing our regulatory interpretation dated August 11, 2003. However, should you have any remaining questions or concerns, we would be prepared to again meet with you to discuss them. Please contact Sharon Leitch of my staff at 617-918-1647 or, if you prefer, ask the Congressional offices to contact Michael Ochs at 617-918-1066 to set up any such meeting.

Sincerely,

Marvin Rosenstein, Chief
Chemicals Management Branch

cc: Senator Edward M. Kennedy
Senator John Kerry
Representative John F. Tierney
Michael Ochs, Congressional & State Relations, EPA
G. Gosbee, Chief, Hazardous Waste Unit, EPA
K. Rota, Chief, RCRA Enforcement Unit, EPA
J. Fowley, RCRA Atty., ORC - EPA
Charlotte Mooney, EPA Office of Solid Waste
J. Miller, Chief, Waste Branch, MADEP
J. Duclos, Supervisor, Hazardous Waste Compliance Section, NHDES
D. Sattler, Supervisor, WEED, CTDEP
L. Grandchamp, Chief, Waste Management, RIDEM
S. Ladner, Supervisor, Licensing Unit, MEDEP
P. Marshall, Chief, Hazardous Materials Management Division, VTDEC

August 11, 2003

Mr. Stu Muller
Boston Specialty Group
PO Box 52
Georgetown, MA 01833

re: Arsine Gas Cylinder Recycling

Dear Mr. Muller:

The letter is in response to our recent discussions and a meeting which took place in our offices with you and the Massachusetts Department of Environmental Protection (MADEP) on June 10, 2003, regarding your proposal to recycle arsine gas cylinders, and your request that EPA make a regulatory determination regarding the status of these cylinders when they are no longer useful to the manufacturer.

As background to this topic, we understand that there is currently a company which manufactures cylinders for use in the electronics industry. The cylinder consists of an absorbent media, a valve and the canister which contains the media. This media is used to absorb gas, in this case, arsine. A customer would require these types of cylinders for a particular application and when they are no longer able to remove gas from these cylinders the customer will return it to the manufacturer. The manufacturer would then either refresh the cylinder with more arsine or determine that the cylinder is no longer useful and send it off for disposal as a hazardous waste. One situation in which the manufacturer would discard the cylinder is when the "media" inside becomes contaminated. Another situation is when a cylinder has becomes so depleted that arsine gas can no longer be extracted by the customer, and the manufacturer either cannot or does not refresh the cylinder with more arsine gas. You are proposing to establish a business whereby you would take these "discarded" cylinders, remove any remaining gas and the contaminated media, and then send the cylinder and valve back to the original manufacturer for reuse. These two items have a significant monetary value to the manufacturer. You have suggested that these discarded cylinders should be considered a product for reworking and not a hazardous waste and have asked for EPA's opinion on this subject.

CONCURRENCES

SYMBOL	OHW	ORC	OHW	SER	CMB			
SURNAME	[illegible]	[illegible]	Cooshey	Rotak	Cobb for MR			
DATE	8/7/03	8/7/03	8/8/03	8/8/03	8/11/03			

Following a review of the information you provided and after discussions within the Region and with EPA Headquarters we have come to the conclusion that the cylinders which are determined to be no longer useful to the manufacturer are a solid waste. Subsequently, your process that you propose appears to be regulated, in that if the cylinders that you receive are hazardous then you would need to be receiving them on a hazardous waste manifest. Additionally, your proposed operation in which the cylinders are "reworked" would be considered a hazardous waste recycling operation (assuming that it is shown to be legitimate recycling, as discussed below). Therefore, in your proposed business, you would be considered a "designated facility" in accordance with 40 CFR Part 260.10.

The basis for our solid waste determination is that we would consider the cylinders to fall into the category of a spent material being reclaimed (see 40 CFR Part 261.2). The definition of "spent material" includes any material that has been used and as a result of contamination can no longer serve the purpose for which it was originally produced without processing. A material is reclaimed if it is processed to recover a useable product. We considered whether the cylinders could meet the definition of "off-specification commercial chemical product" but determined that this definition was not applicable in this situation since the cylinders have become contaminated or depleted during use rather than being defective initial products. Note that the EPA has broadly interpreted spent materials to include materials which need to be reprocessed due to any impurity, factor or circumstance which causes the material to be taken out of service. See Memorandum, Shapiro to Hazardous Waste Division Directors, March 24, 1994. We also considered whether the cylinders when discarded by the manufacturer would meet the definition of an empty container. However, following a review of the regulations at 40 CFR Part 261.7 (and comparable State regulations) we have determined that they would not meet this criteria. The containers will contain all of the original media as well as some arsine gas, and clearly will not be empty.

If shown to be legitimate, the process by which you propose to "rework" the cylinders would be considered a recycling operation which would be exempt from the federal permitting requirements of Subtitle C of RCRA (see 40 CFR Part 261.6(c)(1) (parenthetical) and Part 261.6(c)(2)). This is based on the fact that items that you propose to recycle would fall under the definition of recyclable materials found at 40 CFR Part 261.6(a)(1). In order to maintain the permitting exemption of Part 261.6(c)(1) you must operate your proposed process as a legitimate recycling operation. The Agency has defined legitimate recycling to include, at a minimum, the following criteria: minimal processing is required to produce a final product; the final product has some value and there is a market for that product; the material is handled in a manner consistent with the raw material or product it is replacing; and the material is handled in a manner in order to minimize losses. Additionally, hazardous wastes which are recycled are still subject to the requirements for generators, transporters and storage facilities (see 40 CFR Part 262, 263, and all applicable sections of part 124, 264, 265, 266, 268, and 270.) Please note that the permitting exemption for recycling does not apply to the storage of the material prior to

recycling. If you intend to store any hazardous waste on-site, prior to introducing it into the recycling process then you would be subject to the RCRA Subtitle C requirements for storage facilities. The actual permit would need to be obtained from the MADEP, rather that the EPA. Note that although this is not federally required, the MADEP also requires permits for recycling operations not involving storage.

Should you decide to go forward with the proposed operation (not withstanding our opinion that it will be subject to RCRA regulation), we advise you to contact the EPA and MADEP further to demonstrate that the recycling operation will be legitimate and will be conducted safely. In particular, in your preliminary discussions with us, you have indicated that the plan would be to capture all of the arsine to be removed from the depleted containers, and thus that the operation would have no hazardous air emissions. We would want to see documentation of this. Note that an operation which removed hazardous gas from containers only to put it into the air might be considered illegal disguised treatment rather than legitimate recycling.

Finally, please note that the Commonwealth of Massachusetts, in accordance with Section 3006 of the Resource Conservation and Recovery Act (RCRA), is authorized to administer and enforce the base RCRA program in lieu of the federal program. Therefore, we suggest that you continue your discussions with the MADEP regarding applicable state regulations which may go beyond the minimum federal requirements.

If you have any questions regarding this response, please do not hesitate to contact Sharon Leitch, in the Hazardous Waste Unit, at (617)918-1647.

Sincerely,

Marvin Rosenstein, Chief
Chemicals Management Branch

cc: G. Gosbee, Chief, Hazardous Waste Unit, EPA
K. Rota, Chief RCRA Enforcement Unit, EPA
J. Fowley, Atty., ORC-EPA
J. Miller, Chief, Waste Branch, MADEP
J. Duclos, Supervisor, Hazardous Waste Compliance Section, NHDES
D. Sattler, Supervisor, WEED, CTDEP
L. Grandchamp, Chief, Waste Management, RIDEM
S. Ladner, Supervisor, Licensing Unit, MEDEP
P. Marshall, Chief, Hazardous Materials Management Division, VTDEC

9441.1994(07)

March 24, 1994.

MEMORANDUM

SUBJECT: Definition of Spent Material

FROM: Michael Shapiro, Director
Office of Solid Waste

TO: Hazardous Waste Management Division Directors
Regions I-X

The purpose of this memorandum is to clarify when a secondary material meets the definition of "spent material". A spent material is "any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without further processing." 40 CFR §261.1(c)(1). A number of EPA Regions have requested assistance from EPA Headquarters on making regulatory determinations for secondary materials that may meet the regulatory definition of spent material. For many secondary materials this determination is important because spent materials being reclaimed are solid wastes. 40 CFR §261.2(c)(3). However, sludges and byproducts that exhibit a characteristic of a hazardous waste and commercial chemical products (whether listed or characteristic) are not solid wastes when reclaimed. 40 CFR §261.2(c).

In particular, EPA Headquarters has been asked whether in order to meet the definition of spent material, a material must: 1) be spent as a result of contamination, and 2) be nonfunctional in the sense that it could not continue to be used for its original purpose. We have consistently interpreted this definition as applying to "materials that have been used and are no longer fit for use without being regenerated." 50 FR at 618 (January 4, 1985); 48 FR at 14476 (April 4, 1983). We thus consider "contamination", as used in the definition of spent material, to be any impurity, factor or circumstance which causes the material to be taken out of service for reprocessing. (See also 50 FR at 624, indicating that the reference to contamination was added to clarify that a material such as a solvent may continue to be used for its original, though not identical, purpose and not yet be classified as a solid waste.)

Similarly, we consider the part of the definition stating that a spent material "can no longer serve the purpose for which it was produced" as being satisfied when the material is no longer serving its original purpose and is being reprocessed instead. EPA has consistently maintained this interpretation since it promulgated the definition of spent material.<1>

This is the only interpretation that makes environmental sense, since once used materials are taken out of service and sent for reclamation they pose the same potential risks and are handled in the same manner regardless of the reason they are taken out of service. Put in terms of a specific example, lead acid batteries that are taken out of service and sent to a lead reclaimer pose the same risks and are handled the same way no matter how many or how few physical and chemical impurities they contain, and no matter how much or how little the presence of impurities contributed to the decision to stop using the battery in the first place. See United States v. Ilco Inc., 996 F. 2d 1126 (11th Cir. 1993), where the court held that all batteries sent to a secondary lead smelter for recovery were "spent materials" without regard for the reason the batteries were taken out of service.

As another example, when a generator removes mercury-bearing thermostats from buildings as part of an upgrade to the building's heating system, the thermostats could continue to be used for the remaining portion of their useful lives. However, assuming the generator intends to ship these thermostats to a reclamation facility for mercury recovery, these thermostats would be considered to be spent materials irrespective of the reason for their removal and the fact that the thermostats were potentially capable of being used as thermostats in another building.

Background/Analysis

Under RCRA Subtitle C regulations, a spent material is "any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing." 40 CFR §261.1(c)(1). This definition was promulgated in the 1985 final rule amending the definition of solid waste. 50 FR 614, January 4, 1985.

The preamble to the final rule makes it clear that the "as a result of contamination" language was added to avoid classifying as waste a used material that was actually being put to further direct use. 50 FR at 624. The preamble gives the example of a solvent that is not clean enough to clean circuit boards but still clean enough for use as a metal degreaser.

The reason the "as a result of contamination" language was chosen is because many spent materials such as solvents and spent activated carbon typically become spent because of impurities. The Agency did not intend to restrict the definition of spent materials to only those materials which became spent as a result of this type of contamination. On the contrary, in the same rule that the Agency defined spent material, EPA promulgated regulatory requirements under Subtitle C for spent lead-acid batteries being reclaimed. The Agency explicitly classified spent lead-acid batteries as spent materials in the final rule. 50 FR at 625. These batteries become "spent" for a variety of reasons (e.g., overcharging, frozen electrolyte, leakage) all of which EPA regards as being "contamination" for purposes of the definition.

Regarding whether a material must be nonfunctional to meet the definition of spent material, the fact that a material can continue to be used for its original purpose is not relevant to the issue of whether or not it is a spent material when it is clear from the facts that the material will not be used but instead will be treated by reclamation. The mere potential for continued original use does not preclude a material from being defined as spent. As stated above, the fact that it is actually removed from service establishes, as to this generator, that it can no longer serve its original purpose.

If all that were required to avoid RCRA Subtitle C regulation would be a showing that a secondary material could continue to be used, then generators would be able to circumvent RCRA simply through changing their operating practices to remove secondary materials just prior to that material being unfit for its original use. Thus, spent solvents that are heavily contaminated but might still be fit for metal degreasing (even though they were being sent to be regenerated into new solvents), spent lead-acid batteries that still had a charge (or were capable of holding a charge), and mercury-bearing thermostats removed from buildings sent for reclamation would not be subject to RCRA regulation in spite of the fact that the generator was no longer using the material but instead was sending it to be treated by reclamation.

Clearly, this result is not consistent with the cradle-to-grave purpose of RCRA Subtitle C regulation. Used materials taken out of service and sent for reclamation also pose the same risks and are handled in the same manner regardless of the reason they are taken out of service. For this reason, EPA has consistently interpreted spent materials as including materials which could continue to be used for their original purpose but are, in fact, being taken out of service for reclamation, showing that for this generator they can no longer serve the purpose for which they were produced.<2>

Conclusion

Because spent materials being reclaimed (or to be reclaimed) are within the definition of solid waste, it is important to be able to distinguish among spent materials, other categories of solid wastes such as sludges, and products which are still in use that have not been discarded. Spent materials are distinguished from products and other categories of solid wastes in that they have been used previously and have been taken out of service and are going to be treated by reclamation. Examples of spent materials include spent lead-acid batteries, used mercury switches, spent solvents, spent catalysts and spent etchants.

This memorandum states the Agency's consistent interpretation of the existing regulations. However, EPA recognizes the issues regarding the regulatory definition of spent material and we may consider revising the regulatory definition in the future. If you have further questions on this issue, please call Mike Petruska of my staff at (202) 260-8551.

cc: Susan Bromm
Susan O'Keefe
NEIC, Frank Covington

1 See 50 FR at 650 (January 4, 1985), indicating that spent batteries, spent mercury, spent acids and

caustics remain subject to regulation when reclaimed regardless of the reason these wastes are removed from service, November 6, 1986 letter from Matt Straus to H. Bzura stating that copper etchants sent for reclamation were defined as "spent materials (i.e., materials that have been used [sic] are no longer fit for use without being regenerated, reclaimed, or otherwise reprocessed)." See also April 14, 1989 letter from Stephen Cochran to Robert Oleszko indicating that ignitron tubes containing mercury sent for reclamation were spent materials irrespective of the reason that the tube was taken out of service.

2 See May 20, 1987 letter from Matthew Straus to Peter Russell indicating that spent pickle liquor becomes a spent material/solid waste when it is removed from pickling line baths regardless if it can continue to be used. See also July 15, 1990 letter from Sylvia Lowrance to Ralph Eschborn indicating that photographic fixer bath sent for reclamation is a spent material even though the solution could continue to be used as a fixer.

1852

Gary Gosbee
04/23/03 09:20 AM

To: Sharon Leitch/R1/USEPA/US@EPA
cc:
Subject: Waste Machine Coolant Question

Sharon - please see me on this when you have a minute.

Thx
Gary

----- Forwarded by Gary Gosbee/R1/USEPA/US on 04/23/03 09:19 AM -----

Ken Rota
04/18/03 07:23 AM

To: carolmarsh@snet.net
cc: Sharon Leitch/R1/USEPA/US@EPA, Gary Gosbee/R1/USEPA/US@EPA, Carol Krasauskis/R1/USEPA/US@EPA
Subject: Waste Machine Coolant Question

Dear Ms. Marsh,

I was forwarded your message regarding labelling requirement for waste machine coolants and questions about what type of machine coolants can be mixed. As a practical matter, we have found that many waste machine coolants often become contaminated from the use of degreasing solvents located near this equipment and used to clean parts. Not knowing you're exact situation, I would advise you to first determine whether or not your waste coolants are actually hazardous wastes if you operate your facility in a similar manner. As far as waste coolants are concerned, federal requirements found at Part 279 identify basic waste management standards that identify the requirements you need to comply with. You should be able to download these regulations off the internet from the EPA general website.

In general, oils regulated under Part 279 would be marked as used oil and you would have some other basic container management standards to comply with as well. There is no federal prohibition against mixing different types of coolants (water-based/oil-based). However, you may find that the disposal facility may not prefer crossed mixed coolants if it impacts their ability to recycle this material. As a final suggestion, you should contact the CT DEP office. Many of our New England states regulate waste coolants as hazardous wastes regardless of whether these coolants have become contaminated from other on-site activities or not. The CT DEP can provide you with the specific information you need to comply with their rules and regulations.

Sincerely,

Ken Rota, Chief
RCRA Compliance Unit
US EPA - New England Region
Direct Tel: (617) 918-1751
Direct Fax: (617) 918-0751
Office Fax: (617) 918-1809
http://www.epa.gov/region1

****

I need help locating the labeling requirements of stored waste machine coolants and how to find out what types of coolants can be mixed.
email address
carolmarsh@snet.net
first and last name

carol marsh
organization
SSI Manufacturing
phone number
860-589-8004 x112

Gary Gosbee
04/23/03 10:05 AM

To: Sharon Leitch/R1/USEPA/US@EPA
cc:
Subject: Waste Determination Question

Sharon, let's discuss when you have a minute.

Thx
Gary

----- Forwarded by Gary Gosbee/R1/USEPA/US on 04/23/03 10:04 AM -----

Ken Rota
04/15/03 08:53 AM

To: ashetland@lithion.com
cc: Carol Krasauskis/R1/USEPA/US@EPA, Sharon Leitch/R1/USEPA/US@EPA, Gary Gosbee/R1/USEPA/US@EPA
Subject: Waste Determination Question

Dear Mr. Shetland,

I was forwarded your message concerning waste determinations for wastes not listed under Part 273. I'm not exactly sure what the misunderstanding might be but for clarification purposes, Part 273 is designed to allow reduced management standards for wastes that would otherwise be regulated as hazardous wastes and subject to the full-blown requirements of 40 CFR Part 262. If particular waste streams are not listed under Part 273 then they do not qualify for this special exemption unless and until the CT DEP adds these additional waste streams to the Part 273 list.

As such, the waste determination regulations already outlined at 40 CFR 262.11 and in effect for the last 23 years would be the process required by all generators to determine if any solid waste generated by their activities may be hazardous. So if, for example, any solid wastes your company produces are not "listed" hazardous wastes under Subpart D of Part 261 or do not qualify for any of the special exemptions that may apply (such as Part 273), you are still required to determine whether these wastes would otherwise fail any of the hazardous characteristics described Part 261, Subpart C. These procedures outlined in the regulations identified specific test methods and also allow generator knowledge, provided that you, as the generator, are able to obtain information that documents the types of constituents that are found in your products and demonstrate the concentrations of any hazardous constituents would not exceed the regulatory limits set for those chemicals.

The characteristics described at Part 261, Subpart C represent the federal "safety net" designed to capture wastes that exhibit certain characteristics that may pose a threat to human health or the environment that aren't otherwise specifically listed. EPA always directs every generator to contact their state agency since many state agencies may be more strict and often regulate additional wastes as state hazardous wastes that the federal government did not include in our list of hazardous chemicals.

Hopefully this information helps you to properly characterize your wastes.

Sincerely,

Ken Rota, Chief
RCRA Compliance Unit
US EPA - New England Region
Direct Tel: (617) 918-1751
Direct Fax: (617) 918-0751

(1)

Ken Rota
03/31/03 08:00 AM

To: diane.maxwell@dla.mil
cc: Gary Gosbee/R1/USEPA/US@EPA, Sharon Leitch/R1/USEPA/US@EPA, Jeff Fowley/R1/USEPA/US@EPA
Subject: Waste Aerosol Cans

Dear Ms. Maxwell,

I was forwarded an email/controlled correspondence from you requesting Region 1's position on adding the D003 (reactive) to waste aerosol cans containing other waste codes (i.e. D001). The question you pose does not represent a matter of regional interpretation and is a simple matter of proper waste determination under 262.11. If, during your hazardous waste determination procedures, you find that waste aerosol cans also exhibit the characteristic of reactivity, in addition to any other characteristics (typically ignitability, heavy metals and certain solvent constituents), then that additional waste code must be identified and, the waste, when manifested off-site, must be declared on the LDR notice (waste codes on a manifest are state requirements) along with the proper LDR treatment code. This position, as well as other EPA interpretations/explanations of the regulations are publically available on EPA's website found at http://www.epa.gov/rcraonline.

Sincerely,

Kenneth B. Rota, Chief
RCRA Compliance Unit
US EPA - New England Region
Direct Tel: (617) 918-1751
Direct Fax: (617) 918-0751
Office Fax: (617) 918-1809
http://www.epa.gov/region1

1 of 2

Ken Rota
01/14/03 08:06 AM

To: dfarmer@wurtheastern.com
cc: Cynthia Greene/R1/USEPA/US@EPA, Gary Gosbee/R1/USEPA/US@EPA, Jeff Fowley/R1/USEPA/US@EPA, Sharon Leitch/R1/USEPA/US@EPA
Subject: Re: Oclansorb

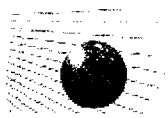
Dear Mr. Farmer,

Your email was forwarded to me by Cynthia Greene. The majority of the New England states regulate used oil, including spills involving used oil. The fact that peat is used instead of clay does not matter since it is the presence of oil which causes the material to be regulated. As such, I would direct you to contact each state regarding there procedures for handling oil contaminated materials. Depending upon the individual state involved, oil collected by your absorbent could be regulated as a state hazardous waste and subject to a variety of requirements. While the possibility may exist for this type of waste to be burned in an incinerater, such a determination is site specific and is based upon the characteristics exhibited in the oil by a particular generator and is not dependent upon the use of your particular product or the fact that it is peat-based. My advice to you, therefore, is to have your customers contact the various state agencies in which they are located to provide them with the site-specific details of the oils that they use and the types of contaminants that may be contained in these oils to determine the appropriate handling, management and disposal methods.

Sincerely,

Ken Rota, Chief
RCRA Enforcement Unit
EPA - New England Office

Cynthia Greene



Cynthia Greene
01/13/03 08:58 AM

To: Ken Rota/R1/USEPA/US@EPA
cc:
Subject: Oclansorb

Can you answer?

Cynthia L. Greene
Senior Advisor
Office of Assistance and Pollution Prevention
US EPA New England
One Congress Street, Suite 1100 (SPP)
Boston, MA 02114-2023
617-918-1813
FAX: 617-918-0813
greene.cynthia@epa.gov
----- Forwarded by Cynthia Greene/R1/USEPA/US on 01/13/03 08:57 AM -----

Doug_Farmer@natacct.com
01/10/03 10:39 AM

To: Cynthia Greene/R1/USEPA/US@EPA
cc:
Subject: Oclansorb

Hello Cynthia,

I left a voice mail for you earlier today & wanted to follow up with an e-mail.

I work for a distribution company that sells Oclansorb which is a organic peat moss from Newfoundland. It is used primarily to pick up waste oil. I would like to know the guidleines that I can use throughout MA (& New England if the same) regarding disposal.

I have a 1992 paper from the DEP on "Waste management guidance for industrial wipers and sorptive materials contaminated with waste oil" which shows a hierarchy of the disposal of waste oil:
1.Reduce 2. Reuse/Recycle 3.Incinerate 4.Landfill
Our product would fit into #3 _waste oil that was spilled in smaller quantities that could not be picked up and recycled.

The paper mentions a "one drop test" & paint filters liquids test.
Oclansorb has passed:
-TCLP Procedure 1311
-LT50 Toxicity Test
-Paint Filter Test 9095
-ASTM Test

We are selling Oclansorb as a product that is more environmentally friendly than clay based products beacause:
- It uses much less material
-It will not leach oil

I are not looking for an endorsment but would like to be clear what I can tell my customers:
-Is Oclansorb ok to send to incinerator (preferred) or landfill if used within the hierarchy of waste management?
I would be glad to provide information and product if needed.
Please advise. Thank you.

Wurth Eastern Fastener Corp
Doug Farmer
240 Cherry Street
Shrewsbury, MA 01545
cell 508-612-6102 (best place to reach me)

Phone: 508.842.4442
Fax: 508.842.6608

dfarmer@wurtheastern.com